

McKnight Boulevard and 68 St NE Operational Review

Background Report

August 2025

Mobility Operational Improvement Capital Program

Mobility's Operational Improvements Capital Program is used to implement relatively low cost, high benefit improvements to the transportation network. The Operational Improvements Program has had a \$1,000,000 annual budget for fiscal years 2023 to 2026 and has been fully utilized.

The McKnight & 68 St NE intersection is ranked third highest on a list of locations identified for potential operational improvements. The first two are:

1. **Northbound 5 Avenue flyover to eastbound Memorial Drive** has a merge condition that occurs on a curve. This is undesirable and the location has a history of rear-end and sideswipe type collisions. The merging activity also slows traffic flow on the flyover. Extending the merge lane east along Memorial Drive would permit merging beyond the curve, would address the collision issue and would facilitate better traffic flow on Memorial Drive and on the 5 Ave flyover.
2. **The intersection of 16 Avenue and 68 Street NE** has substantial delay and congestion issues. Daily traffic volume is approximately 75,000 vehicles. Implementation of dual northbound and southbound left turn lanes to better facilitate the high volume of turns would reduce delay and congestion. Through lanes of 68 Street would need to be moved to provide dual turning lanes.

Operational Improvement Priority List of Unfunded Projects

● High Priority

1. 5 Ave Flyover to Memorial Dr – Extend merge lane to improve safety and traffic flow
2. 16 Ave & 68 St NE – Add dual left-turn lanes southbound
3. McKnight Blvd & 68 St NE – Add dual right-turn lanes southbound
4. Macleod Trail & Lake Fraser Gate – Add dual left-turn lanes westbound
5. 17 Ave & 84 St SE – Add dual right-turn lanes southbound
6. Heritage Dr & Glendeer Circle SE – Modify island to reduce rear-end collisions from northbound right turns
7. 52 St & 61 Ave SE – Address left-turn collision issues from both directions
8. Country Hills Blvd & Coventry Blvd/Harvest Hills Way – Add northbound right-turn lane
9. Memorial Dr & 68 St SE – Add dual left-turn lanes northbound
10. 52 St & 54 Ave SE – Widen eastbound lane

Mid Priority

11. 162 Ave & Shawville Blvd – Add dual right-turn lanes northbound
12. Sarcee Trail & Beacon Shopping Centre Access – Add three left-turn lanes westbound
13. Macleod Trail & Glenmore Trail – Extend left-turn lane southbound

Operational Improvement Priority List of Unfunded Projects (cont'd)

Low Priority

- 14. Barlow Trail & 106 Ave SE – Add dual left-turn lanes westbound
- 15. 52 St & McIvor Blvd – Add dual left-turn lanes southbound and a smart right-turn lane northbound
- 16. Metis Trail & Country Hills Blvd NE – Various improvements to address rear-end collisions from right turns
- 17. 162 Ave & Shawville Way – Add westbound U-turn

🚶 Pathways / Missing Links

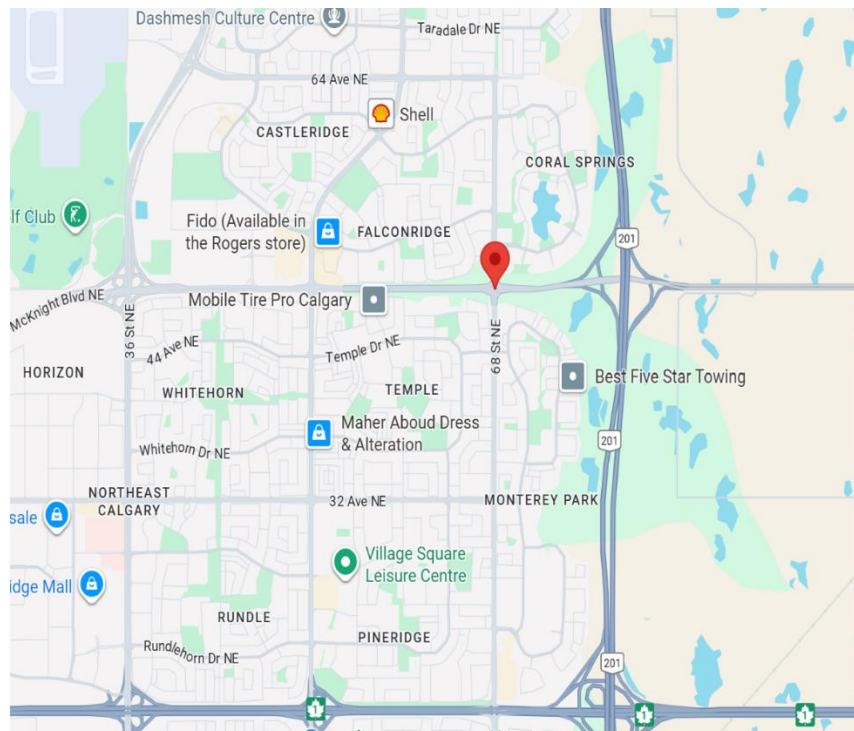
- 18. 50 Ave SE (Barlow Trail to 30 St SE) – Add pathway on north side
- 19. 50 Ave SE (32 St SE to 35 St SE) – Add pathway on north side
- 20. SW corner of 50 Ave SE & 52 St SE – Add pathway on north side

Note: This list is subject to updates as new safety statistics, traffic data, information or priorities emerge.

McKnight Boulevard and 68 Street NE

Recent Improvements

The intersection experiences high vehicle demand and is currently operating at capacity, resulting in delay and congestion and is recognized as a location that requires improvements. In response to operational and safety issues, the following changes have been made at the intersection.



2017: to address a left turn collision issue, signal operation for all four left turns was revised to permit left turns on an arrow only. This has resolved the left turn collision issue.

2022: to address a rear-end collision issue, a merge lane was built for the westbound to northbound right turn. This replaced a yield condition. Rear-end collisions have been reduced.

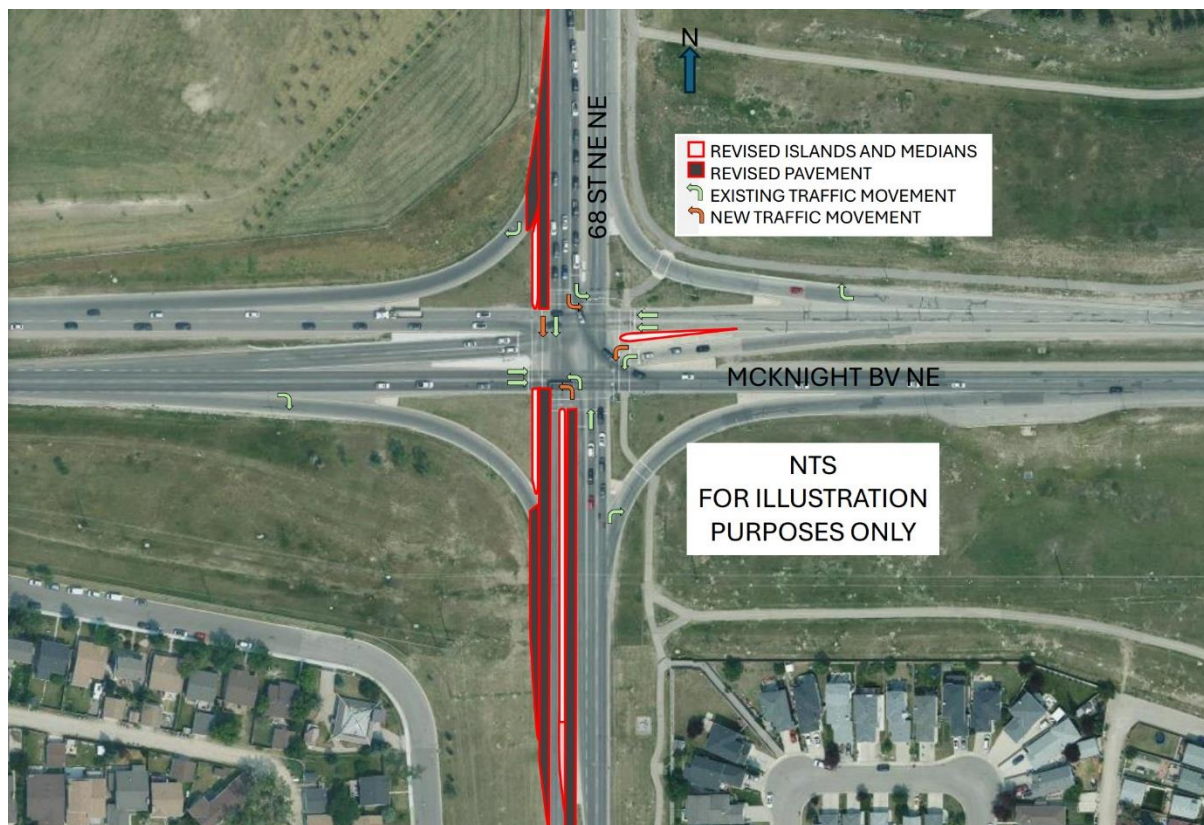
2023: a second eastbound left turn lane was built to increase capacity.

Several signal timing changes have been made to operate the intersection as efficiently as possible.

Further Operational Improvements & Concept

At McKnight Boulevard and 68 Street NE, high left turn volumes using single left turn lanes result in congestion and delay. A concept to provide dual northbound, southbound and westbound left turn lanes has been developed. As shown, through lanes of 68 Street would need to be moved to provide dual turn lanes.

The estimated cost for these improvements is \$6M to \$6.5M.



Analysis has shown that implementing dual left turn lanes would result in a 12% reduction in annual fuel consumption (240,000 litres) and a 12% reduction in annual greenhouse gas emissions (6500 kg). There are other options for improvements at McKnight Boulevard and 68 Street NE, such as grade separation of specific movements or construction of an interchange.

Further investigation is required to determine benefits and investment requirements.

TUC Boundary Change

Alberta Infrastructure advised that as of August 12, 2025, the TUC boundary has been moved eastward on the east side of 68 Street NE at McKnight Boulevard, as shown below.

This permits the City of Calgary to undertake construction in the area east of 68 Street NE without approval from Alberta Infrastructure.

Mobility will investigate if it may be more suitable to move 68 Street lanes to the east to facilitate the implementation of dual turn lanes, rather than to the west.



Site Map for Restricted Development Area Amendment

Area to be Excluded Shown Outlined in Pink



SITE MAP PROPERTY #5

LEGAL: SW 1-25-29-W4 and NW 36-24-29-W4

Calgary Transportation/Utility Corridor

Asset Management/Land Planning

Date: 12/13/2024

Scale: NTS

This aerial photograph shows the intersection of 16th Avenue NE and 68th Street in Seattle. The intersection is marked with a red dashed line. The surrounding area includes residential neighborhoods with houses and trees, as well as a large commercial building with a parking lot. The text '16 AV NE' is visible on the left side of the image, and '68 ST NE' is visible on the right side.